# **Activity:** Line Item Construction and Maintenance

			Fixed Costs & Related	Program		Change
D	FY 2006	EV 0007 0D	Changes	Changes	Budget	From FY
Program Components	Actual	FY 2007 CR	(+/-)	(+/-)	Request	2007 (+/-)
Line Item Construction &	216,890	121,931	+0	-16,845	105,086	-16,845
Maintenance (\$000)						
Line Item Construction &	216,890	121,931	+0	-16,845	105,086	-16,845
Maintenance (\$000)		·		·	•	
Total FTE Requirements	80	80	0	0	80	0
Impact of the CR		[0]		[0]		

# **Summary of FY 2008 Program Changes for Line Item Construction**

Request Component	(\$000)	FTE	Page #
Reduce Program	-16,845	0	CONST-8
TOTAL Program Changes	-16,845	0	

Impact of the FY 2007 Continuing Resolution (\$0) – Given the line item nature of this activity, lacking direction as to what work is to be funded under the FY 2007 continuing resolution, new construction would not be initiated. About \$100 million in projects, approved by the Full House and the Senate Committee and requested by the Administration, and that are ready to execute to address critical resource protection or health/safety issues, would not proceed.

#### **Activity Overview**

The National Park Service Line Item Construction and Maintenance Program provides for the construction, rehabilitation, and replacement of those assets needed to accomplish the management objectives approved for each park using a two-tier priority system that maximizes construction investments. The first tier assesses and prioritizes improvements related to health and safety, resource protection, maintenance needs, and visitor services. High priority projects in the first tier are then ranked using Choosing-By-Advantage methodology to evaluate the relative benefits provided by individual projects, and projects are scored according to the Department's Five-Year Deferred Maintenance and Capital Improvement Plan criteria. The NPS incorporates a facility condition index (FCI) and the asset priority index (API) which measures the facility's importance to the mission of a park to ensure that its capital asset investments are made as efficiently as possible. This allows NPS to benchmark improvements on individual assets, and measure improvements at the individual asset level, park level, and national level.

#### **Justification of FY 2008 Program Changes**

The FY 2008 budget request for the Line Item Construction program is \$105,086,000 and 80 FTE, a program decrease of \$16,845,000 and 0 FTE from the FY 2007 President's Budget.

Focus the Line Item Construction Program on High Priority Assets for Deferred Maintenance (-\$16,845,000) — Within available resources, the NPS proposes to proposes to focus line item construction on a balanced capital investment program consisting of (1) deferred maintenance and emergency projects to improve overall asset condition, (2) new capital construction related to visitor services, and (3) resource protection projects to protect and improve conditions in natural resources areas. Despite this proposed reduction, all the other categories of maintenance and rehabilitation are higher in the FY 2008 request. Repair and rehabilitation is up \$22 million and preventative maintenance is up \$35 million and funding for roads from the Federal Lands Highways Program will increase by \$15 million to \$225 million.

**Program Performance Change Table** 

	2004 Actual	2005 Actual	2006 Actual	2007 CR <sup>1</sup>	2008 Base Budget (2007 + Fixed Costs)	2008 Plan	Program Change Accruing in 2008	Program Change Accruing in Outyears	
					Α	B=A+C	С	D	
Proposed Construction Projects			45 proposed	24 proposed	24	20	-4	Number of projects will remain at decreased level	
Total Actual/Projected Cost (\$000)			\$214,890	\$121,931	\$121,936	\$105,086	- \$16,850		
Comments		Variability in projects does not allow for meaningful unit costs. Costs and performance include all contributing Programs.							

<sup>&</sup>lt;sup>1</sup> The performance and cost data in the 2007 CR column is presented at the 2007 plan level, which is based upon a projection of 2007 likely enacted made during the first quarter of 2007. The 2008 plan builds on the 2007 plan. To the extent Congress enacts a 2007 appropriation that is different from the 2007 projection, the 2008 plan may require revision.

Note: Projected costs may not equal program change as these are full costs, which may include funds from other sources and (or) use averages.

Column A: The level of performance and costs expected in 2008 at the 2007 President's Budget level plus funded fixed costs. Reflects the impact of prior year funding changes, management efficiencies, absorption of prior year fixed costs, and trend impacts, but does not reflect the proposed program change.

Column D: Outyear performance beyond 2008 addresses lagging performance — those changes occurring as a result of the program change (not total budget) requested in 2008. It does <u>not</u> include the impact of receiving the program change again in a subsequent outyear.

## **Program Overview**

Based on the latest physical inventory data available, the national park system contains approximately 1,800 bridges and tunnels, over 26,000 historic structures including historic buildings, 7,590 public use and administrative buildings, over 770 campgrounds, over 8,500 monuments and statues, over 500 dams, 680 water systems and waste water collection systems, 200 solid waste systems, 5,300 family housing units, approximately 5,803 paved miles of public park roads, the equivalent of 948 paved miles of parking areas, 6,544 miles of unpaved roads, and 1,679 associated road structures (bridges, culverts, and tunnels). Without the construction activity, access to park areas, the preservation and rehabilitation of historic and archeological structures, the construction of park recreation and operational facilities-such as museums and other interpretive structures, and the provisions of safe and sanitary water and sewer systems, would be impossible. Projects are also programmed to protect the existing Federal investment in such facilities through reconstruction and rehabilitation projects and to restore lands to natural conditions through the removal of outdated or excess facilities.

Facility Condition Index: Line Item Construction prioritization is an evolving process. Currently the NPS uses a two tier priority system to maximize its construction investments. The first tier of evaluation factors assesses improvements related to health and safety, resource protection, maintenance needs, and visitor services. Projects demonstrating high priorities in the first tier are then ranked using Choosing-By-Advantage methodology to evaluate the relative benefits provided by individual projects. The NPS has recently completed condition assessments for most of its facilities, and established a Facility Condition Index (FCI) for each asset. The Facility Condition Index quantifies the condition of a structure by dividing the estimated amount needed to correct its deferred maintenance backlog by its current estimated replacement value. To ensure that its capital asset investments are made as efficiently as possible, the NPS is incorporating FCI analysis into the prioritization process by comparing the existing FCI of a facility against the proposed FCI after the construction investment. Based on this output, the NPS will then be able to benchmark improvements on individual assets, and measure improvements at the individual asset

level, park level, and national level. The NPS also uses the asset priority index (API) to determine the relative importance of assets at each park to assist in the decision-making for the most efficient allocation of funds for construction, maintenance, and repair or rehabilitation. The API ranks shown on the FY 2008 construction project data sheets are based on a scale of 1 to 100, with 100 denoting the highest priority. A list of proposed FY 2008 line construction projects demonstrating the effects of applying the FCI follows below.

PARK, PROJECT	PROJECT NUMBER	ESTIMATE (\$000)	CURRENT FCI	POST- CONSTR FCI
San Francisco Maritime,-Rehabilitate Failing amphitheater Structure in Aquatic Park NHL District	102086	10,051	0.24	0.00
Channel Islands NP - Replace Failing 700' pier at Santa Rosa Island	006626	9,295	0.99	0.00
Wind Cave NP – Replace - Failing Elk Mountain Campground Water System	094166	1,158	0.96	0.00
Redwood NP – Protect Park Resources by Removing Failing Roads	059730	2,346	0.77	0.00
Rocky Mountain NP, Rehabilitate Primary Powerlines	077504	2,817	0.67	0.00

With the funding expected through FY 2010, the NPS will bring most of its asset portfolio into acceptable condition overall, as measured by the Facility Condition Index.

**Capital Asset Planning:** The Service has implemented Capital Asset Plans (CAP) for major line item construction projects. Information in the CAP is used to track the performance of projects against the approved baselines and Servicewide goals. Each CAP contains a section listing specific Servicewide goals to be accomplished by the project. Projects failing to meet quarterly baseline goals are identified and appropriate steps are implemented to improve project performance.

**Facility Modeling Program:** In FY 2004, the Service completed initial development of all major facility models including maintenance facilities and visitor centers. The models provide the Service with guidelines for acceptable building sizing and site development of these facilities. Cost estimating for facilities sized with the facility modeling program is done by the Servicewide Cost Estimating Software System (CESS).

5-Year Deferred Maintenance and Capital Improvement Plan: The NPS has developed a comprehensive plan to identify projects of the greatest need in priority order, with special focus on critical health and safety and critical resource protection. Limited changes to the list are made annually to factor in Congressional appropriations and changing situations in the field. Examples of circumstances that could change the list are maintenance/construction emergencies from severe storm damage, descriptions of work that change as a result of condition assessments (e.g., the scraping of boards for repainting reveal extensive wood deterioration requiring complete replacement), or identification of a failing sewer system. The Service is also placing greater emphasis on developing projects to improve structural fire protection and incorporating these projects into the Five-Year Deferred Maintenance and Capital Improvement Plan. A summary table of the Five-Year Line Item Construction Plan (FY 2008 - 2012) and complete project descriptions of the FY 2008 construction projects are provided in this submission. The FY 2009 – 2012 construction project description sheets are to be provided in a separate volume.

All eligible NPS line item construction projects are scored according to the Department of the Interior priority system that gives the highest scores, and paramount consideration for funding, to those projects that will correct critical heath and safety problems, especially if the project involves the repair of a facility for which corrective maintenance had been deferred. The following are the weighted ranking criteria, in priority order: Critical Health and Safety Deferred Maintenance need, Critical Health and Safety Capital Improvement need, Critical Resource Protection Deferred Maintenance need, Critical Resource Protection Capital Improvement need, Critical Mission Deferred Maintenance need, Compliance and

Other Deferred Maintenance need, and Other Capital Improvement need. These scores, and the criteria against which they are rated, are shown on the justification for each line time construction project.

Based on the weighting factors accompanying each category listed above, projects are scored with a weighted score not to exceed 1,000 points. Then these rankings are banded into the following categories: 800-1,000 points; 500-800 points; and 0-500 points. Urgent life safety/deferred maintenance projects are included in the highest band. The NPS also uses a comparative factor analysis to evaluate projects within each band. This process assists in determining the priorities and phasing of projects within each band.

Servicewide Development Advisory Board: The Servicewide Development Advisory Board (DAB), created in March 1998, ensures that Servicewide development strategies are met in a sustainable and cost-efficient context. The DAB consists of four Associate Directors, three Regional Directors, two park superintendents, and is supported by professional staff. Associated with, and participating in all DAB meetings are non-NPS Advisors who bring an external prospective to the process. Projects reviewed by the Development Advisory Board include: line item construction projects; large recreation fee projects; road improvement projects involving realignment, new construction or extensive reconstruction; partnership projects including major Concessioner developments inside parks; and unique construction activities.

The DAB holds meetings throughout the year. Projects presented are reviewed for technical requirements, sustainability, value-based decision making, and policy guidelines. The DAB reviews have resulted in extensive use of value analysis in the early planning/design phases of all projects. The application of value analysis principles has resulted in significant cost avoidance and improved benefits reducing individual project costs as they proceed through the design process.

The FY 2008 National Park Service Line Item Construction request represents a \$16.845 million decrease from the anticipated program for FY 2007 although this will be offset with a number of signature projects to be funded with donations and matching mandatory funds through the Centennial Initiative. The line item construction program continues to be a major part of the President's initiative to reduce Servicewide backlogged infrastructure needs. The FY 2008 Line Item Construction and Maintenance Projects list consists of 20 projects in 19 national park system areas. The projects are listed alphabetically by park on the FY 2008 Comprehensive Construction Table which is followed by a photographic overview and the individual Project Data Sheets. \*

Due to uncertainties associated with future year project scopes and costs, the NPS Five-Year Maintenance and Capital Improvement Plan is currently undergoing extensive review and revision. An updated copy of the plan will therefore be provided to the Committees under separate cover at a future date.

## **FY 2008 Program Performance**

With FY 2008 base funding the program expected to work on about 7 projects. Impacts of the proposed cut have not been fully assessed pending review of emergency projects.

National Park Service FY 2008 Budget Justifications

**Program Performance Overview – Line Item Construction and Maintenance** 

End Outcome Goal End Outcome Measure / Intermediate or PART Measure / PART Efficiency or other Outcome Measure	T y p	2004 Actual	2005 Actual	2006 Enacted	2006 Actual	2007 President's Budget	2007 Plan	2008 Plan	Change from 2007 Plan to 2008	Long-term Target 2012
Management Excellence End Outcome Goal 2 - Modernization/Integration										
PART Efficiency and Other Output I	Vleas	ures								
Employee Housing: % of employee housing assets in fair or good condition as measured by the Facilities Condition Index (FCI) based on condition assessments and data in FMSS. (BUR IVa5)	С	18% (954 of 5,300) Baseline FY 2004	38% (1,444 of 3,800) Revised Baseline + 490 in FY 2005	40% (1,520 of 3,800)	70% (2,676 of 3,800)	Goal dropped by NPS	Goal dropped by NPS	Not applicable	Not applicable	Measure dropped after FY 2006
Comments:			tion to the appro	•						
Participating Programs:		ONPS Facility	Operations and	Management	, Construction	- Special Proje	cts			
Facility condition: Other facilities, including roads, dams, trails, bridges are in fair or better condition as measured by the appropriate Facilities Condi-tion Index (SP, BUR IVa11C)	С	0.300 FY 2004	0.183 down 0.117 in FY 2005	0.230	0.175	Dropped by DOI and NPS	Dropped by DOI and NPS	Not applicable	Not applicable	Measure dropped after FY 2006
Comments:		Costs distribu	tion to the appro	priate mission	-level goal. W	nen measuring	FCI, lower is be	etter.		
Participating Programs:		ONPS Facility	Operations and	d Management						
Facilities condition: Recreation Facilities are in fair to good condition as measured by the Facilities Condition Index (SP, BUR IVa11D)	С	No data	No data	Reporting suspended granted by DOI.	Reporting suspende d granted by DOI.	Dropped by DOI and NPS	Dropped by DOI and NPS	Not applicable	Not applicable	Measure dropped after FY 2006
Comments:		Costs distribut	tion to the appro	priate mission	-level goal.					
Participating Programs:		ONPS Facility	Operations and	Management						
Condition of all NPS historic buildings as measured by a Facility Condition Index. (PART CR-8)	С	0.210	0.170	0.210	0.210	0.210	0.210	0.210	+ 0.0 (+ 0%)	TBD
Comments:		This PART me	easure is not co	sted. Costs di	stributed to ap	propriate mission	on level goals.	When measuring	g FCI, lower is bett	er.
Contributing Programs:		ONPS Cultura	l Resources Ma	nagement and	Facility Oper	ations and Man	agement			
Condition of all NPS regular assets as measured by a Facility Condition Index (Score of 0.14 or lower is acceptable) (PART FM-1)	С	NA	NA	0.164	0.179	0.178	0.178	0.174 - 0.004 in FY 2008	- 0.004 ( - 2.2%) (0.004 / 0.178)	0.150

End Outcome Goal End Outcome Measure / Intermediate or PART Measure / PART Efficiency or other Outcome Measure	T y p	2004 Actual	2005 Actual	2006 Enacted	2006 Actual	2007 President's Budget	2007 Plan	2008 Plan	Change from 2007 Plan to 2008	Long-term Target 2012
Comments:		This PART me	easure is not co	sted. Costs dis	tributed to app	oropriate missio	n level goals.	When measuring	FCI, lower is bette	er.
Contributing Programs:		ONPS Facility	Operations and	l Management						
Condition of all NPS buildings as measured by a Facility Condition Index (score of 0.10 or lower is acceptable) (PART FM-2)	С	0.100	0.170	0.130	0.180	0.120	0.120	0.110 - 0.01 in FY 2008	- 0.01 ( - 0.083%) (0.01 / 0.12)	TBD
Comments:		This PART me	easure is not co	sted. Costs dis	tributed to app	oropriate missio	n level goals.	When measuring	FCI, lower is bette	er.
Contributing Programs:		ONPS Facility	NPS Facility Operations and Management							
Condition of priority NPS buildings as measured by a Facility Condition Index (Score of 0.05 or lower means portfolio is in good condition on average) (PART FM-3)	С	0.130	0.190	0.050	Pending	0.050	0.050	0.040 - 0.01 in FY 2008	0.01 (- 20%) (0.01 / 0.05)	TBD
Comments:		This PART me	This PART measure is not costed. Costs distributed to appropriate mission level goals. When measuring FCI, lower is better.							
Contributing Programs:		ONPS Facility	ONPS Facility Operations and Management							

Note: The 2007 plan is the performance level based upon a projection of 2007 likely enacted made during the first quarter of 2007. The 2008 plan and the 2012 long-term targets build on the 2007 plan. To the extent that Congress enacts a 2007 appropriation that is different from the 2007 projection, the 2008 plan and 2012 targets may require revision.